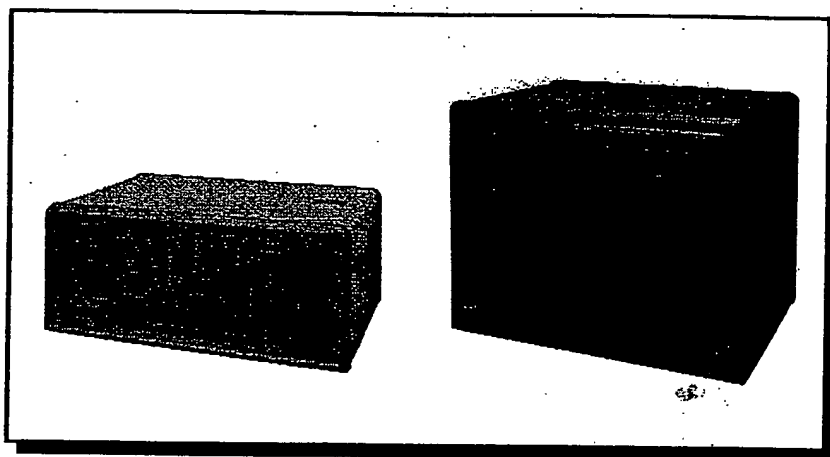




Portable electronic air cleaners

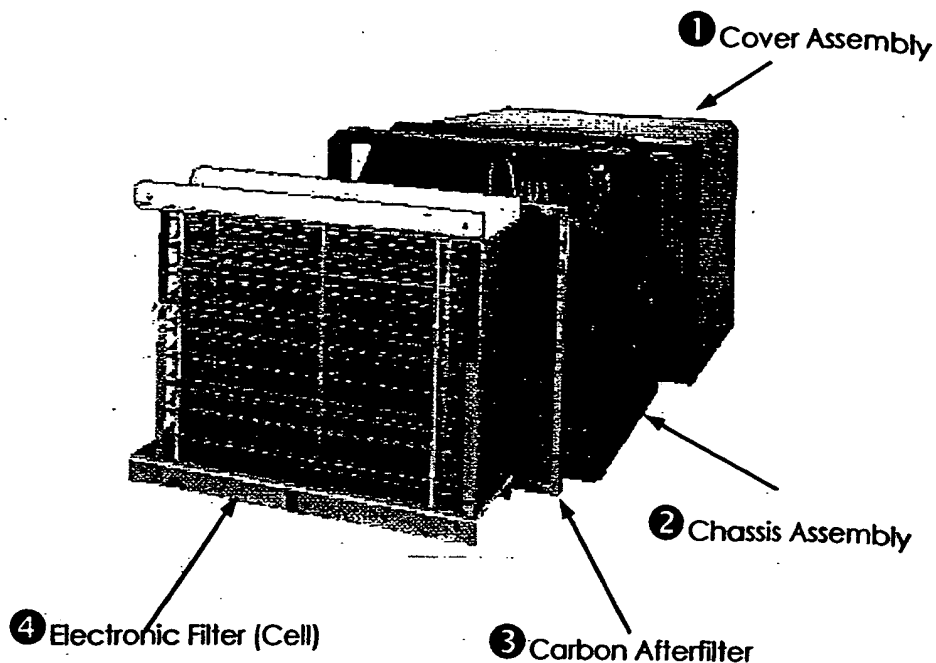
Operating and Service Manual

Excel (120v) Maxum (120v)
Excel 230 (230v) Maxum 230 (230v)



LakeAir International, Inc.
1509 Rapids Dr.
Racine, WI 53404
Ph: 262-632-1229
Fax: 262-632-3144
<http://www.lakeair.com>

DESCRIPTION OF PARTS



1. COVER ASSEMBLY: The vinyl covered metal cover assembly is secured to the chassis by means of two screw fasteners on top of the unit. The cover assembly includes the two grille sections.

2. CHASSIS: The chassis consists of the base of the Excel and Maxum and has several components of the unit attached to it. The motor and fan, power supply, control switch, and all internal wiring are found in the chassis.

3. CARBON AFTERFILTER: The carbon afterfilter is standard in all Excel and Maxum units and is used as an afterfilter to remove objectionable odors from the cleaned air.

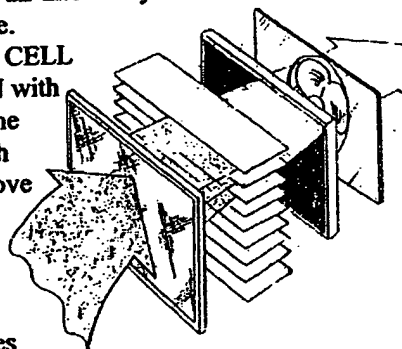
4. ELECTRONIC FILTER (CELL): This is the workhorse of the LakeAir Air Cleaner and performs the major function of the air cleaner by removing the particles from the air. The cell is activated by the power supply and is designed to remove even the smallest particles, down to 0.01 microns in size, or 1/25,400 of 1 inch.

stain-
ash-

HOW A LakeAir UNIT WORKS

In business establishments or in y our home, millions of airborne particles are continually being circulated in the air you breathe. A LakeAir Electronic Air Cleaner removes these smoke, dust, dirt, and pollen particles with an electrostatic process that works this way:

1. The internal circulating fan draws the dirty air into the system where it first must pass through the outer grille.
2. The air then passes into the ELECTRONIC CELL where it encounters the IONIZING SECTION with its many fine ion wires. These wires charge the airborne particles by exciting them with a high electrical charge. As the charged particles move along to the collecting section, they are trapped by the collector plates much like a magnet attracts and collects metal filings.
3. The ACTIVATED CARBON AFTER FILTER, the final filter in the system, removes odors and freshens the air.
4. The cleaned and purified air is then returned to the room environment.



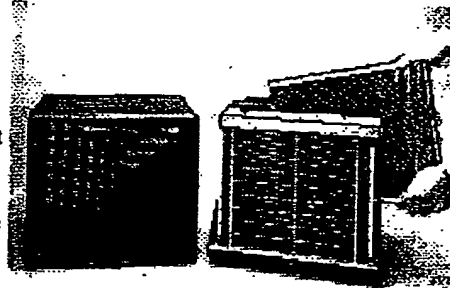
SPECIFICATIONS

| | EXCEL | EXCEL 230 | MAXUM | MAXUM 230 |
|--------------------|------------------------------|-------------------------------------|-------------------------------|-------------------------------------|
| Input Voltages: | 120v 60 Hz 72 Watts | 230v 50 Hz 72 Watts | 120v 60 Hz 102 Watts | 230v 50 Hz 102 Watts |
| Cleaning Capacity: | Low: 70 cfm High: 110 cfm | Low: 21 m3/min. High: 34 m3/min. | Low: 210 cfm High: 275 cfm | Low: 65 m3/min. High: 85 m3/min. |
| Actual Size: | 17" x 8" x 15" | 43cm x 20cm x 38 | 17" x 13" x 15" | 43cm x 33cm x 38cm |
| Actual Weight: | 17lbs. | 7.7 kg | 24 lbs. | 10.9kg |
| Shipping Size: | 18" x 9" x 15" | 48cm x 30cm x 38cm | 18" x 15" X 16" | 49cm x 38cm x 41cm |
| Shipping Weight: | 22 lbs. | 9.9 kg | 29 lbs. | 13.2 kg |

UNPACKING AND OPERATING INSTRUCTIONS

In order to operate your LakeAir Air Cleaner properly, it is necessary to remove plastic packing material from the carbon afterfilter inside the unit. Follow the step-by-step instructions and you will soon be enjoying clean fresh air.

1. Remove the two fasteners from the top of the cabinet using a Phillips head screwdriver.
2. Lift the cover assembly from the chassis and set aside.
3. Remove the carbon afterfilter from behind the cell. Take off the protective packing material and discard.



4. Replace the carbon after filter, then the cover assembly, making sure to include both of the fasteners. NOTE: The fasteners must be in place and secured snugly or the unit will not operate.

Place your LakeAir Air Cleaner in a convenient area in the desired room. If you are using the air cleaner for a specific purpose, such as smoke removal, locate the air cleaner as close as possible to the source. (Such as near a smoking stand.) Care should be taken to allow at least 4-6" of unobstructed space behind the unit so that it will exhaust freely into the room. If, however, you position the unit so that the airflow is parallel to the nearest wall, you need not allow as much free space. For best results the unit should be elevated by placing it on a table or stand. It can also be mounted on a wall, using our convenient wall mount option.

Plug the line cord into a standard household outlet with 120V AC 60 Hz (230 models require 230 V AC 50 Hz). Caution should be taken to use the unit only on the required voltage, as to otherwise will void the warranty.

OPERATING AND MAINTENANCE INSTRUCTIONS

Position the unit and plug it into the proper line voltage before turning it on.

1. To turn unit on, locate the three-position rocker switch on top of the unit. Depress the button to activate the unit on the desired speed; *High*, *Low*, or *Off* (center, flat position). Under normal conditions, the *Low* position is adequate to keep an average size room clean. With excessive amounts of dust, smoke, or other pollutants present, the air cleaner should be operated on high.

2. To shut the unit off, simply push the button to its center (flat) position and unplug the unit from the line voltage.

NOTE: It should be noted that occasionally a large particle will pass through the electronic cell and an arcing will occur, resulting in an audible cracking sound. This is normal and will not cause any damage to the unit.

Maintenance

Your LakeAir Air Cleaner is a high quality, precision piece of equipment designed for long years of satisfactory performance. Adhere to a regular maintenance schedule and no problems should occur. This unit should be checked periodically for "dust load" and cleaned if found to have a large accumulation of dust and dirt. Under regular conditions cleaning can be done once every 1 or 2 months. Under other more severe conditions more frequent cleaning may be required. To obtain maximum efficiency from your LakeAir Electronic Air Cleaner, it must be kept clean.

In addition to the grilles and electronic cell, care should be taken to keep the rest of the unit clean as well.

Disassembly and Cleaning

1. Turn off unit and disconnect line cord from outlet.
2. Remove fasteners from cover assembly.
3. Lift cover from chassis.
4. Remove ground screw from base of chassis connecting chassis to the electronic cell. Lift cell from chassis, being careful not to bend any of the plates on the electronic cell.
5. The electronic cell may be cleaned in a number of ways, but the best way is to soak it in a container of hot water into which has been dissolved a cup of dishwasher detergent or other cleaner that is safe for aluminum. After soaking for 10-15 minutes, agitate the filter (cell) in the solution to release some of the particles. Alkaline cleaners, such as our LA-99 heavy duty cleaning solution, may be used with care. Be certain to read and follow all directions carefully to avoid damage to the aluminum cell components caused by harsh chemical agents. LA-99 can be obtained through your dealer or by calling LakeAir directly.
6. It may be necessary, if the cell is extremely dirty, to repeat the soaking process or to take a small soft brush to the plates of the cell.

If this is done, care should be taken not to damage the plates or the fine ion wires between the widely spaced plates on the ionizer section of the cells. After soaking, rinse off all traces of the detergent with clean warm water and allow the excess to drain off. Before replacing the cell into the chassis, make sure the cell is completely dry.

7. The electronic cell may also be washed in the normal cycle of a household dishwasher, but caution should be taken to avoid damage to the closely spaced plates of the unit.

8. Do not wash the carbon afterfilter. This filter should be brushed or cleaned with a vacuum cleaner if any dust is present. This filter should also be replaced when there is an indication that it is no longer absorbing odors. Normal replacement is approximately every 4-6 months.

NOTE: TO INSURE PROPER OPERATION, FILTERS SHOULD BE CLEANED AT REGULAR INTERVALS. FAILURE TO CLEAN ELECTRONIC FILTER WILL VOID WARRANTY.

Reassembly

1. Place the dry electronic filter (cell) back on the chassis, making sure the wider spaced plates (ionizer section) face the outside of the unit. Also make sure the handle is at the top of the unit.
2. Insert the ground screw in the proper location and tighten.
3. Place the carbon afterfilter back into the unit.
4. Replace the cover assembly and secure with the fasteners.
5. Before plugging the unit in, make sure the power button is in the *Off* position. Plug in the line cord and turn the unit on to the *High* or *Low* position. If arcing occurs, turn the unit off until the electronic filter cell has been dried completely.

Maintenance

Your LakeAir Air Cleaner is a high quality, precision piece of equipment designed for long years of satisfactory performance. Adhere to a regular maintenance schedule and no problems should occur. This unit should be checked periodically for "dust load" and cleaned if found to have a large accumulation of dust and lint. Under regular conditions cleaning can be done once every 1 or 2 months. Under other more severe conditions more frequent cleaning may be required. To obtain maximum efficiency from your LakeAir Electronic Air Cleaner it must be kept clean.

In addition to the grilles and electronic cell, care should be taken to keep the rest of the unit clean as well.

Disassembly and Cleaning

1. Turn off unit and disconnect line cord from outlet.
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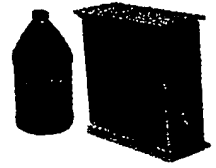
NOTE: TO INSURE PROPER OPERATION, FILTERS SHOULD BE CLEANED AT REGULAR INTERVALS. FAILURE TO CLEAN ELECTRONIC FILTER WILL VOID WARRANTY.

Reassembly

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2. Insert the ground screw in the proper location and tighten.
3. Place the carbon afterfilter back into the unit.
4. Replace the cover assembly and secure with the fasteners.
5. Before plugging the unit in, make sure the power button is in the *Off* position. Plug in the line cord and turn the unit on to the *High* or *Low* position. If arcing occurs, turn the unit off until the electronic filter cell has been dried completely.

LA-99

Multi-purpose concentrated cell cleaning solution



INDICATIONS:

A heavy duty cleaner-degreaser that is *non-toxic, non-flammable and biodegradable*. Removes dirt, carbonized grease, ink, oil, wax, soap scum and heavy soil from any surface.

APPLICATIONS:

Electronic air cleaner filter cells, tools, acoustic tiles, cement, stainless steel, ferrous metals, firebrick, engines and motor casings, washing machines, wax stripping and many other uses.

DIRECTIONS:

Use one (1) part "LA-99" cell cleaning solution to five to ten (5-10) parts water. *NOTE: The use of hot water accelerates the cleaning action. For heavy grease, tobacco tar or nicotine, multiple applications may be necessary.* Either soak cell in solution or spray on - wait for 5-10 minutes and rinse very well with clean water. Allow the cell to dry thoroughly before reinstalling into cell cleaner.

Caution must be used in cleaning aluminum or other soft metals. DO NOT allow prolonged contact and immediately rinse very well with water. Contact time should not exceed five (5) to ten (10) minutes and gloves must be worn when using LA-99.

INDUSTRIAL STRENGTH PRODUCT - USE WITH CARE AND KEEP OUT OF THE REACH OF CHILDREN.

Contains alkaline cleaners, builders and detergents. Use with sufficient ventilation. Do not ingest or let contact skin. In case of contact, flush affected area well with water.

NOTE

TO INSURE PROPER PERFORMANCE READ OWNER'S MANUAL
BEFORE OPERATING. IF THE SUPPLY CORD OR ANY OTHER
ELECTRICAL COMPONENT OF THIS UNIT IS OR BECOMES DAMAGED,
DO NOT ATTEMPT TO REPAIR IT YOURSELF.

CAUTION

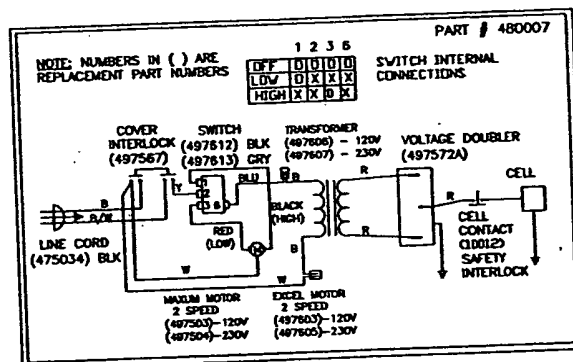
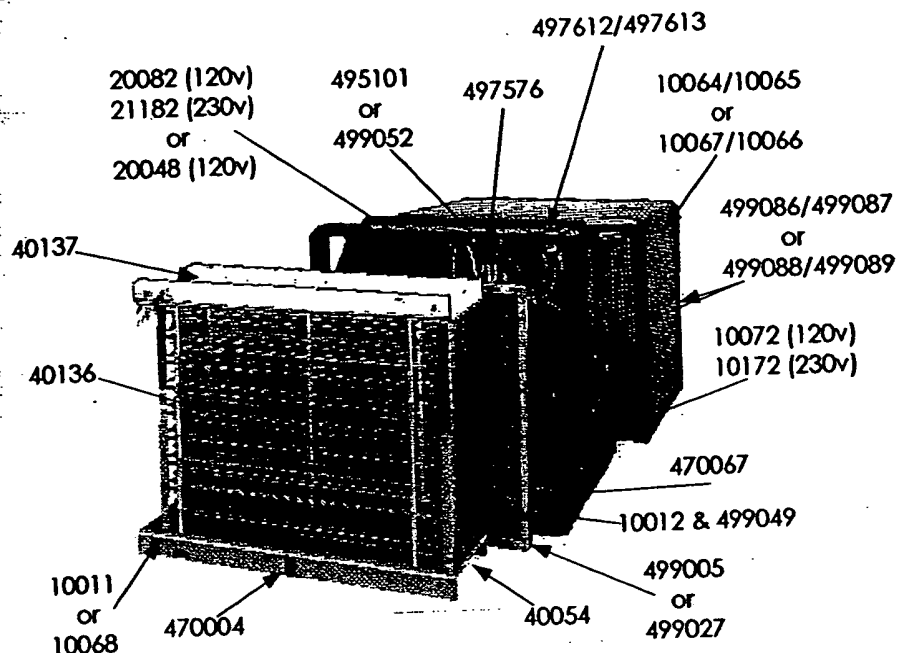
PLASTIC WRAPPING AROUND
HEPA / CARBON FILTER MUST BE
REMOVED BEFORE OPERATING

TROUBLESHOOTING YOUR LakeAir ELECTRONIC AIR CLEANER

Some of the common causes for malfunction of your air cleaner are listed below. Review them should you have a problem, and perform the corrective measures listed here. If your LakeAir Electronic Air Cleaner is not restored to proper operation, contact your Dealer, nearest Authorized Service Center, or LakeAir.

| Problem | Possible Cause | Possible Remedy |
|--|---|---|
| Air cleaner will not operate | Control switch is in <i>Off</i> Position | Depress power switch to <i>High</i> or <i>Low</i> |
| | Power cord not plugged in | Plug in power cord |
| | Blown fuse in household or breaker tripped. | Replace fuse or reset breaker |
| | Cover removed | Replace cover |
| | Cover fasteners not tight | Tighten fasteners snugly |
| Small volume of air discharged from unit | Extremely dirty electronic filter (cell) | Clean according to Instructions |
| | Plastic packing still on carbon after filter | Remove plastic wrap |
| Unit not effectively cleaning the air | Electronic filter dirty | Clean according to Instructions |
| | Electronic filter is not properly installed | Check reassemble instructions |
| Continuous "arcing" or snapping noise | Excessive accumulation of dirt on the electronic filter | Clean according to Instructions |
| | Electronic filter still damp | Allow filter cell to dry Completely |
| | Bent or damaged plate on electronic filter. (cell) | Check and straighten |
| Odors more pronounced than usual | Service life of carbon after filter expired | Discard and replace the carbon after filter |
| | Air cleaner being used in a confined space | Open doors to the adjoining rooms |

If any of the problems are not solved to your satisfaction, please contact your Dealer or LakeAir



EXCEL PARTS

| Part# | Description |
|--------|--------------------------|
| 10068 | Electronic Filter Cell |
| 499027 | Carbon Afterfilter |
| 10066 | Cover Assembly-Woodgrain |
| 10067 | Cover Assembly-White |
| 20082 | Motor 120v |
| 21182 | Motor, 230v |
| 499052 | Fan Blade |
| 499086 | Grille, Black |
| 499087 | Grille, Grey |

MAXUM PARTS

| Part# | Description |
|--------|--------------------------|
| 10011 | Electronic Filter Cell |
| 499005 | Carbon Afterfilter |
| 10064 | Cover Assembly-Woodgrain |
| 10065 | Cover Assembly-White |
| 20048 | Motor, 120v |
| 21148 | Motor, 230v |
| 495101 | Fan Blade |
| 499088 | Grille, Black |
| 499089 | Grille, Grey |

PARTS COMMON TO BOTH UNITS

| Part# | Description |
|--------------|---------------------------------------|
| 10012&499049 | Cell Contact Bracket |
| 40054 | Ion Connector Strap |
| 470004 | Ground Screw U-Clip |
| 497572A | Voltage Doubler |
| 497606 | Transformer 120v |
| 497607 | Transformer 230v |
| 40136 | Ion Wires w/S-Hooks and Springs (6) |
| 40137 | Ceramic Insulators w/Screws (4/8) |
| 470067 | High Voltage Wire Jiffy Clip Fastener |
| 470033 | Black cover Fastener |
| 495159 | White Cover Fastener |
| 497613 | Grey Rocker Switch |
| 497612 | Black Rocker Switch |

LakeAir ELECTRONIC AIR CLEANERS

7 YEAR LIMITED WARRANTY

The complete LakeAir Electronic Air Cleaner is warranted by LakeAir International, Inc. to the original purchaser to be free from defects in material and workmanship under normal use and service for a period of one year from the date of purchase. In addition, LakeAir International, Inc. warrants the power supply module and transformer in the LakeAir Electronic Air Cleaner for an additional six (6) years, or a total of seven (7) years from the date of purchase to the original purchaser. LakeAir's liability is to be limited to repairing or replacing such products during the warranty period at its option, providing the product is sent prepaid to LakeAir International, Inc. or an Authorized Service Center and is deemed to the satisfaction of LakeAir International, Inc. to be defective in any part or portion.

This warranty is in lieu of any other warranty expressed or implied and of all other obligations or liabilities in connection with the sale of the described LakeAir Electronic Air Cleaner. In no case will any claim for consequential damages or labor expenses be allowed. This warranty does not apply to a LakeAir Electronic or any part thereof which has not been operated in accordance with the operating instructions herein contained; where components or other accessories not compatible with the LakeAir Electronic Air Cleaner have been used or attached to it; which has been subject to accident, unauthorized alteration, abuse, damage by flood, fire or acts of nature.

User's Responsibility

Please Note: Your warranty is subject to user responsibility. Some items and some conditions resulting from causes other than manufacturing defects are the responsibility of the user of the LakeAir Electronic Air Cleaner and are not covered by the warranty. These are:

1. To operate and maintain according to instructions.
2. Periodic checking and cleaning of unit. Failure to clean will void warranty.
3. Proper use of controls must be maintained or warranty will be voided.
4. Damage to unit from unsatisfactory operation because of blowing fuses, inadequate electrical service or operation on power supply other than that indicated on the rating plate, or incorrect electrical protection devices used.
5. Damage occurring during transportation or resulting from improper handling.
6. Damage due to accident or resulting from alteration or tampering.
7. Misapplication of product.

lakeair™

International, Inc.
1509 Rapids Drive
Racine, Wisconsin 53404

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Blueair AV 402



| | | | | | | | |
|------|------------|---------|-------|---------------|-----------------|----------------------|---------------|
| Home | Austin Air | Blueair | IQAir | Allergy Units | Chem/Bio Threat | Chemical Sensitivity | Tobacco Smoke |
|------|------------|---------|-------|---------------|-----------------|----------------------|---------------|

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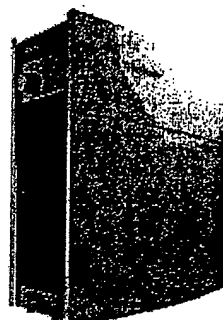
866-855-1238

Blueair 402 Air Purifier

365 Sq-Ft Room

Only \$399.95

Very Quiet Performance



Blueair AV-402 QTY: @\$399.95



Standard Filter Pack QTY: @\$59.00



Replace ever

Smokestop Filter Pack QTY: @\$119.00



Replace ever

Blueair is the system for people living with allergies, asthma, or other respiratory conditions for anyone who wants cleaner, more breathable air. The 402 effectively purifies air in rooms large as 365 square feet. Using patented two-stage HEPASilent™ technology, it captures 99.1% of the tiniest 0.1 micron particles, including allergy-provoking pollen grains, dust mites, mold spores and pet dander particles.

This same filter technology earned the larger Blueair 501 Best of Class ranking in independent testing of Clean Air Delivery Rates. The 402 provides comparable performance for mid-sized rooms.

Value-added features include quiet operation, low energy use, steel construction and easy maintenance: simply open the side, slide out used filters and drop in replacements every 6 m

Size: 21"H, 17" W x 10" D

Weight: 24 Lbs

Power Consumption: 20 to 60 watts

Air Flow Rate:

HOW IT WORKS

Built-in carry handles

4 speed control knob (on side)

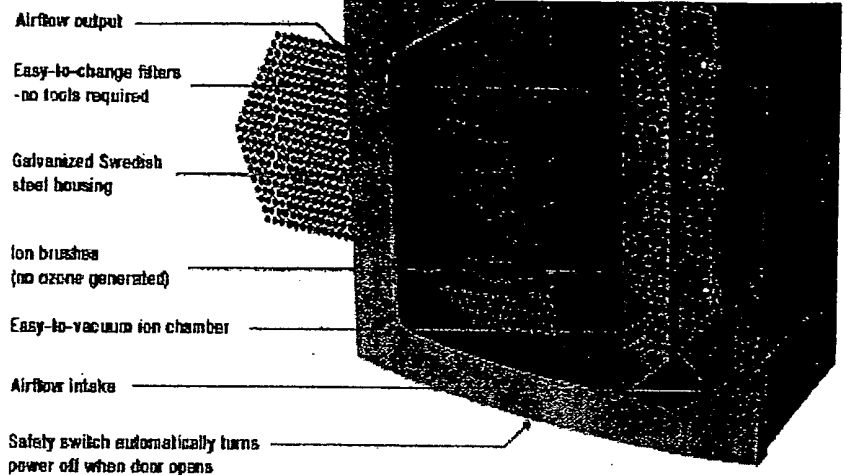
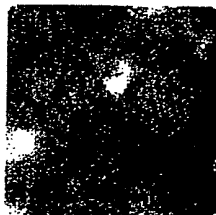
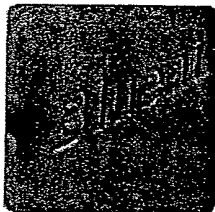
Blue "power on" light



- Speed 3 200 CFM
- Speed 2 125 CFM
- Speed 1 75 CFM

Noise Level:

- Speed 1 36 dB(A)
- Speed 2 45 dB(A)
- Speed 3 58 dB(A)



Superior Quality

Blueair is designed, engineered and built for people who expect very best and don't want to compromise on health, design or function. The Blueair system housing is made of galvanized Swedish steel, rather than less durable plastic. The fan and motor are manufactured by EBM, a maker of telecom and medical equipment. Blueair systems offer an exceptionally long product life and carry a 10-year limited warranty.

Quiet

Sophisticated materials and precision engineering allow Blueair to clean indoor air without the noise associated with less advanced units. On the lowest setting, the units emit no more sound than a desktop computer. To achieve exceptionally quiet operation, Blueair's patented HEPASilent™ filter technology captures particles two ways: with mechanical and electrostatic filter combination creates a filter system through which air flows easily. Most air cleaners require a powerful, noisy fan to pull air through densely packed filters. Since air flows easily through Blueair filter media, the fan doesn't have to work as hard or as loud. Even the housing is designed with quiet operation in mind, replacing resonant plastic with noise-muffling steel.

Surround Air

Instead of discharging a windy stream of filtered air, the Blueair 501 diffuses air gently through an area six times greater than average air cleaner. Operating on its lowest setting, Blueair produces virtually no noticeable draft, while still providing exceptional air exchange rate. Blueair's SurroundAir™ :

achieves peak performance without annoying drafts by drawing dirty air from the sides and bottom, moving it through a less filter media, and releasing clean, filtered air from the side top.

Energy Efficient

Low Energy Cost

Blueair's phenomenally low power usage means you can run system 24/7 without a jump in electricity consumption. In fact, it costs about the same to the air in your home as it does to power a single light bulb: 6 watts on low to 95 watts on high.

Environmentally Aware

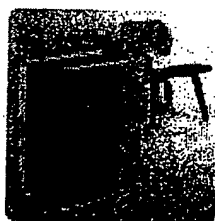
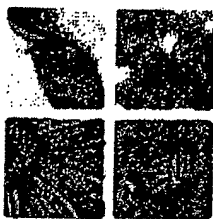
Blueair products offer exceptional performance without polluting the environment. Blueair replaces standard triclosan-coated or glass filter fibers, which can harm the environment released into the waste stream, with safer, nontoxic polypropylene. This revolutionary filter media is one of the least harmful plastics, producing only carbon dioxide and water as it decomposes. Because polypropylene is waterproof, our filters naturally resist contamination from bacteria, viruses and mold, without chemicals or additives or washes. Blueair even uses a special powder coat that produces no chemical outgassing.

Award-Winning Swedish Design



The union of visually pleasing form and effective function is a hallmark of Swedish design, and Blueair is no exception. Its contemporary look has earned Blueair one of the most prestigious design awards in Scandinavia, the Excellent Swedish Design award. In fact, the Blueair resides in a permanent exhibit at the National Museum in Stockholm. At Blueair, we design purification systems to meet your home's aesthetic standards without sacrificing performance.

Easy to Use

Plug it in, select the speed setting, and forget it. Blueair works quietly, at first you may find yourself wondering if it's turned on. Just check the bright blue power on light. Blueair filters require no weekly additives or filter washing. The grilles and powder-coated steel exterior are easy to wipe clean, and won't pick up greasy or oily stains the way plastics can. When the filter needs



replaced (twice yearly), just open the lid, lift out the old filter drop the new ones in. No screws, hooks or tools and less than a minute of your time are required. Used filters are 100% recycled and release no toxins into landfills or the air.

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